Amendments to the Specification:

Please replace paragraph [0007] with the following amended paragraph:

[0007] To protect a gas turbine engine component from its hostile thermal environment, the thermal conductivity of a TBC is of considerable importance. Lower thermal conductivities enable the use of a thinner coating, reducing the weight of the component, and/or reduce the amount of cooling airflow required for air-cooled components such as turbine blades. Though the thermal conductivity of YSZ decreases with increasing yttria content, the conventional practice has been to partially stabilize zirconia with six to eight weight percent yttria (6-8%YSZ) to promote spallation resistance. Ternary YSZ systems have been proposed to reduce the thermal conductivity of YSZ. For example, commonly-assigned U.S. Patent No. 6,586,115 ~~Application Serial No. [Attorney Docket No. 13DV-13490]~~ to Rigney et al. discloses a TBC of YSZ and alloyed to contain certain amounts of one or more alkaline-earth metal oxides (magnesia, calcia (CaO), strontia (SrO) and barium oxide (BaO)), rare-earth metal oxides (ceria, gadolinium oxide, lanthana (La_2O_3), neodymia (Nd_2O_3), and dysprosia (Dy_2O_3)), and/or such metal oxides as nickel oxide (NiO), ferric oxide (Fe_2O_3), cobaltous oxide (CoO), and scandium oxide (Sc_2O_3). According to Rigney et al., when present in

sufficient amounts these oxides are able to significantly reduce the thermal conductivity of YSZ by increasing crystallographic defects and/or lattice strains. Another proposed ternary system based on YSZ and said to reduce thermal conductivity is taught in U.S. Patent No. 6,025,078 to Rickerby et al. The additive oxide is gadolinium oxide, dysprosia, erbia (Er_2O_3), europia (Eu_2O_3), praseodymia (Pr_2O_3), urania (UO_2) or ytterbia (Yb_2O_3), in an amount of at least five weight percent to reduce phonon thermal conductivity.

Please replace paragraph [0013] with the following amended paragraph:

[0013] According to the invention, zirconia and hafnia alloyed with their respective above-noted stabilizers have been shown to have lower thermal conductivities than conventional 6-8%YSZ, allowing for the use of a thinner coating and/or lower cooling airflow for air-cooled components. In addition, the hafnia-based coatings of this invention are resistant to infiltration by CMAS, thereby promoting the life of the TBC by reducing the risk of CMAS-induced spallation. While others have proposed additions of some of the oxides used as stabilizers in the present invention, including the aforementioned U.S. Patent No. 6,586,115 ~~Application Serial No. [Attorney Docket No. 13DV-13490]~~ to Rigney et al., U.S. Patent No. 6,025,078 to

Rickerby et al., U.S. Patent No. 6,117,560 to Maloney and U.S. Patent No. 4,774,150 to Amano et al., such prior uses were based on additional oxides present in limited regions of a TBC (Amano et al.), or oxides added to the binary YSZ system in which zirconia is stabilized by yttria to yield a tetragonal microstructure (Rigney et al. and Rickerby et al.) or a cubic pyrochlore microstructure (Maloney) which therefore differ from the cubic (fluorite-type) microstructures of the present invention.